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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,470	06/29/2001	Alan K. Smith	210022US55 CONT	5512
22850	7590	12/23/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SAUNDERS, DAVID A	
			ART UNIT	PAPER NUMBER
			1644	

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

893 470

Applicant(s)

SMITH et al

Examiner

STANDERS

Group Art Unit

1644

---The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address---

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 8/11/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 46-49, 51-59, 61-87 is/are pending in the application.
- ☐ Of the above claim(s) 66-87 is/are withdrawn from consideration.
- ☒ Claim(s) 46, 48-49, 51-59, 61-65 is/are allowed.
- ☐ Claim(s) is/are rejected.
- ☒ Claim(s) 47 is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Amendment of 8/11/03 has been entered. Claims 46--49, 51--59 and 61--87 are pending.

The examiner does not consider that claims 48--49 should have been indicated as "(new)" in the amendment. These were previously presented.

Claims 46--49, 51--59 and 61--65 are under examination.

The examiner notes that the previous office action of 4/9/03 should be corrected as follows: at page 5, the rejection over Siena et al. should have recited claims -- 46--47, 49, 55--57, 59 and 64 -- in lieu of "46". All these claims were addressed in the consideration of reference teachings at page 6.

Claim 47 is objected to because of the following informalities: In claim 47 "and" has been inserted incorrectly; it should have been inserted at line 5, before "the ability to stimulate T-cells". Appropriate correction is required.

Amendment of 8/11/03 has overcome previously stated bases of rejection under 112, first and second paragraphs.

Amendment has overcome prior art rejections of record.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schwartz et al. (5,728,581) are noted for teaching perfusion culturing methods in which the medium is exchanged at a rate of 0.25 to 0.40 culture volumes per day. They do not teach culturing of dendritic cells.

Kraus et al. (5,674,750) teach a perfusion culturing method in which the medium is exchanged at a rate of 0.89 ml/hr (Example 1). Given the perfusion chamber dimensions (col. 10, lines 32-35) the maximum possible vol. would be

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ca. 1.01 ml (not accounting for the vol. Taken up by the tubing wall and the packed beads). The rate of exchange is taken to be on the order of at least about 100% per hour. They do not teach culturing of dendritic cells.

Applicant has requested reconsideration of the restriction requirement. Groups II and III, drawn to cells and to methods of treatment using cells, are not rejoined, because applicant has given no evidence that the medium exchange rate provides for cells having any qualitatively or quantitatively enhanced properties that could not be obtained by another method –e.g. by culturing with various growth and differentiation factors.

This application contains claims 66--87 drawn to an invention nonelected with traverse in Paper No. 8. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Saunders, Ph.D., whose telephone number is (703) 308-3976. The examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:30 p.m. The examiner can also be reached on alternate Fridays

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan, can be reached on (703) 308-3973. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

D. A. Saunders:jmr

November 21, 2003

David A. Saunders

DAVID SAUNDERS
PRIMARY EXAMINER

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